

ABSTRACT OF THE DISCLOSURE

While a spectrum waveform of an output signal from a subtracter (207) is visibly monitored, an operator controls a variable phases shifter (208) based upon a second control signal (CL2) so that a shape of a spectrum waveform of an output signal from a subtracter (207) is approximated to a spectrum waveform of a desirable wave to change a phase of a local oscillation frequency signal from a local oscillator (206). As a result, a phase of a duplicated loop signal is changed. Also, the operator controls a variable attenuator (209) based upon a first control signal (CL1) so that a shape of this spectrum waveform is approximated to a spectrum waveform of a desirable wave (20) to change a signal level of the duplicated loop signal.